45BC

The additional day which Julius Caesar had decreed should be inserted every 4th year was intercalated in February between the 23rd and 24th days, and thus occurred after the 6th day preceding the Calends (first day) of March. This intercalation resulted in any fixed festival which occurred after FEB falling on the next weekday but one to the day on which it fell in those 3 years when intercalation was not made. Thus

intercalation. Caused FEB 23 to occur twice in intercalary year; the intercalated day was therefore known as BISSEXTO KALENDAS and the year in which this occurred as BISSEXTILE year. (The modern term "leap year" appears to have been derived from the old Norse hlaupar, although the term "bissextile" is still used occasionally

45 BC

The Julian Cal. assumed the length of the yr. to be 365.25 days whereas the tropical year is nearly 365.2422 days. The Cal yr was therefore 0.0078 days or a little over 11 min 15 sec too long. This small fraction does not become significant until a long time has passed and amounts to a little over a day after 130 years.

45BC Jan. 1

Caesar fixed the normal length of the year as 365 days, with one day intercalated every 4 years after February 24, to make up to 365 1/4 days, the supposed true length of the tropical year. Caesar deliberately abandoned the lunar year entirely and adopted a solar year. Except for leap year — all intercalation became

unnecessary. He settled on exactly 365 days 6 hrs. as the length of the year, and an approximation of this value has been used ever since. He had a series of 3 common years and a fourth, a leap year. He also altered the month lengths giving Feb 29 or 30 days. This cal has frequently been called old style and was introduced on Jan 1, 45 BC after 46 BC having 445 days.

45BC

The following Table is most probable. [12/9/92]

46 BC – 445 days	37 BC – 366 (P)	28 BC – 366 (P)
45 BC – 365 This was leap	36 BC – 365	27 BC – 365
44 BC – 365	35 BC – 365	26 BC – 365
43 BC – 366 (P)	34 BC – 366 (P)	25 BC – 366 (P)
42 BC – 365	33 BC – 365	24 BC – 365
41 BC – 365	32 BC – 365	23 BC – 365
40 BC – 366 (P)	31 BC – 366 (P)	22 BC – 366 (P)
39 BC – 365	30 BC – 365	21 BC – 365
38 BC – 365	29 BC – 365	20 BC – 365

19 BC—366(P)   7 BC—365 (A)
18 BC—365   6 BC—365 (A)
17 BC—365   5 BC—365 (A)
16 BC—366(P)   4 BC—365 (A)
15 BC—365   3 BC—365 (A)
14 BC—365   2 BC—365 (A)
13 BC—366(P)   1 BC—365 (A)
12 BC—365
11 BC—365
10 BC—366(P)   P = made leap yr (366)
9 BC—365   by Pontifices every 3 yrs
8 BC—365 (A)   instead of 4.

                 A = Augustus omitted
                 leap yrs (total of 3)
                 from 8 BC—8 AD

JAN. 1, 45BC

Caesar changed the days in the months as follows

JANUARIUS	- 31 ~~or days~~	QUINTILIS	- 31
FEBRUARIUS	- 29 ~ 30	SEXTILIS	- 30
MARTIUS	- 31	SEPT	- 31
APRILIS	- 30	OCT	- 30
MAIUS	- 31	NOV	- 31
JUNIUS	- 30	DEC	- 30

Total 365 days ordinary (Feb 29d)
or 366 days (Feb 30d)

Some say he move Feb from
last to after Jan.

45BC

Caesar's calendar ignored the stars. The year, wholly regulated by the sun, was 365 days until every fourth (leap) year with 366. He met the other old problem (that – to put it in Roman notation – CCCLXV or CCCLXVI cannot be divided by XII) (365 nn 366 cannot be divided evenly by 12) by giving the odd months 31 days, and the even

months 30, except February which had 29 ordinarily, 30 in Leap Year. This was at least a tidier and more memorable arrangement than our present one.

Jan 1, 45 BC

By Jan 1, 45 BC, the calendar was in alignment with the solar year. He abolished the intercalary month. Instead a calendar of 365 days was established by lengthening 7 of the months by a day or 2 and provision was made for an extra "leap-year" day to be added every 4th Year between the 23rd & 24th

of February.

Caesar had the assistance of his secretary MARCUS FULVIUS and the Alexandrian mathematician Sosigenes.